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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/506,945	02/18/2000	David P. Ress	10610RNUS02U;1273/19	9089
27820	7590	03/10/2004	EXAMINER	
WITHROW & TERRANOVA, P.L.L.C. P.O. BOX 1287 CARY, NC 27512			DO, NHAT Q	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/506,945

Applicant(s)

RESS ET AL.

Examiner

Nhat Do

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-26 is/are allowed.
- 6) ☒ Claim(s) 1-21, and 27-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed on 12/19/03 have been fully considered but they are not persuasive.

For the rejection of claim 1, Applicants argue that a skilled artisan would not consider a set of predetermined rules to perform the translation to be a protocol (Remarks page 9, the last 5 lines of the 3<sup>rd</sup> paragraph). Applicants further argue that even if a translation rule set was a third protocol, a rule set to govern translation does not necessarily have to be a superset of the functions provided by the first and second IP telephony protocols (Remarks page 9, last paragraph).

In reply, first of all, a protocol, in general, is a set of rules governing the format of data exchange in communication. Then translating rule set is also a protocol because the rule set determines what format (H.323 or SIP) is appropriate in further routing the call to the next node.

Secondly, claim 1 recites an inter-working agent for providing functions usable by the first and second protocol agents to communicate with each other according to a third protocol, the functions provided by the third protocol being a superset of functions provided by the first and second IP telephony protocols (Claim 1, step c).

The examiner is in the position translating the features (QoS, security...) in H.323 into SIP is providing functions usable by the first and second protocols, and the translated features are superset of functions that are provided by the first and second protocols.

For the rejection of claim 11, Applicants also request for a clarification as to which PX1, PX2, PX3, and GW1 are being disclosed (Remarks page 10, 2<sup>nd</sup> paragraph).

In reply, Salama et al disclose the call routing process in figure 17 is the same as in figure 15 until the call reach PX2 1446. In figure 15, Salama et al disclose the PX1 (first telephony device) receives the call in H.323 (first IP telephony protocol) (Col. 11, lines 30-57). The examiner is in the position the PX1 of fig. 17 (first telephony device) receives the call in H.323 (first IP telephony protocol). In response to receiving the call in H.323, the PX1 of fig. 17 (the first telephony device) routes (generates and transmits) the call to PX2 of fig. 17 using H.323 (second IP telephony protocol). And finally, in response to receiving the call in H.323 (second IP telephony protocol), the PX2 of fig. 17 routes the call to PX3 of fig. 17 in SIP (third telephony protocol) (Col. 13, lines 1-10).

Applicants also argue that the motivation is not supported in the rejection of claim 21 because there is no evidence as to why this motivation would have been obvious to a person having ordinary skill in the art (Remarks page 11, 3<sup>rd</sup> paragraph).

In reply, Salama et al disclose the AS (such as AS2 in figure 18) advertises to which protocols its gateways can support to its peers (such as AS1 in figure 18), which in turn generates a call routing entry depending on the protocol of the call (Col. 13, lines 20-41). In order to select a next hop depending on the protocol as disclosed by Salama et al, there is 'a need' for checking the call routing entry in order to identify which hop is a suitable one. The examiner is in the position checking the call routing entry is

determining whether there is a need for performing translation or not and 'the need' is the motivation for a person of having ordinary skill in the art to make the modification.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 4, 8-11, 13, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,584,093 to Salama et al.

Regarding to claim 1, Salama et al disclose a system in figure 17 having the GW1 receives the call from PX2 in H.323 protocol, translates the call form H.323 to SIP, and further forwards the call to PX3 using SIP (Col. 12, line 49-col. 13, line 40). For performing these operations, it is inherent that the GW 1 comprises:

A means (first protocol agent) for communicating with PX2 (first IP telephony device) using H.323 protocol (first IP telephony protocol);

A means (second protocol agent) for communicating with the PX3 (second IP telephony device) using SIP (second telephony protocol);

A translation means for performing translation between H.323 protocol and SIP.  
It is also inherent that the translation is performed based on a set of predetermined

rules (third protocol), which determines which feature in H.323 protocol equivalent to which feature in SIP.

Regarding to claim 2, for performing translation, it is inherent that the translation means must understand both H.323 protocol and SIP. Therefore, the part of the translation means that understands the H.323 protocol is considered the claimed first inter-working agent component and the part of the translation means that understands the SIP is considered the claimed second inter-working agent component.

Regarding to claims 4, and 13, Salama et al disclose one protocol is H.323 and the other is SIP.

Regarding to claim 8, from figure 17, Salama et al disclose the H.323 part (first inter-working agent component) performs originating call setup function, and SIP part (second inter-working agent component) performs terminating call functions.

Regarding to claim 9, the prefix 408\* is the connection information parameter data structure.

Regarding to claims 10, and 19, the prefix 408\* is the called number originated from PSTN, therefore, it is a DTMF.

Regarding to claims 11, and 20, Salama et al disclose the call first routed from the PX1 to the PX2 before forwarding to the GW1. Therefore,

The call received from the PX1 (first telephony device) by the PX2 is considered equivalent to the claimed first message formatted in first IP telephony protocol;

The call received at the GW1 is considered equivalent to the claimed second message generated in response to receiving the first message. The call received at the

PX3 is considered equivalent to the claimed third message. Furthermore, the prefix 408\* is considered equivalent to the claimed media stream management information.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 7, 14, 21, 27-30, 32, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salama et al.

Regarding to claims 5, and 14, Salama et al fail to disclose in figure 17 that one of the IP telephony protocol is Q.931. However, Salama et al disclosed in figure 14 that an AS, which does not register with a GK, (a telephony device) uses Q.931 to communicate with next AS down the road. A skilled artisan would have motivated to modify the GW 1 in Salama et al so that in can also perform translation between Q.931 and H.323 in order support connect IP telephony call when one of AS does not register with a GK. Therefore, it would have been obvious to a person having ordinary skill in the art by the time the invention was made to made one of the IP telephony protocol is Q.931 in the system of figure 17.

Regarding to claim 21, Salama et al fail to disclose in figure 17 to determine whether to translate the call form H.323 to SIP, and transmitting the call without performing translation. However Salama et al disclose in figure 18 that an AS in some cases connects to different ASes wherein each AS supports different IP telephony

protocol. Therefore, a skilled artisan would have been motivated to modify the AS2 in figure 17 so that prior to perform the translation, determines whether the AS2 connects to a AS that can support H.323 and if that is the case forwarding the call through that path in order to avoid protocol differences. Therefore, it would have been obvious to a person having ordinary skill in the art by the time the invention was made to determine whether to translate the call form H.323 to SIP, and transmitting the call without performing translation.

Regarding to claim 7, further to the rejection of claim 21, Salama et al disclose in figure 18 the first and second protocols are H.323.

Regarding to claims 27, 28, and 32, further to the rejection of claims 1, 2, and 5 respectively, Salama et al, in figure 17, fail to disclose translating the media capabilities information between two protocols because Salama et al fail to disclose the call includes the media capability information. However Salama et al disclose in figure 2 that exchanging media capability information is a known feature in VoIP. Therefore, a skilled artisan would have been motivated to modify the call in figure 17 so that it includes media capability information in order to enforce QoS as taught by Salama et al (Col. 3, lines 15-20). Therefore, it would have been obvious to a person having ordinary skill in the art by the time the invention was made to translate the media capabilities information between two protocols.

Salama et al also fail to disclose a computer program product stored in a computer readable medium for performing these steps. Since it is well known in the art that a procedure can be implemented by software, hardware or the combination of both.

Software is suitable for a system that requires frequent modification because the only change that must be done is rewriting the program. A person of ordinary skill in the art would have been motivated to implement a system by software in order to employ its easy-to-modify feature. Therefore, it would have been obvious to a person having ordinary skill in the art by the time the invention was made to write a computer program product and store the program in a computer readable medium for performing these steps.

Regarding to claim 29, it is inherent the translation procedure is reverse in the opposite direction.

Regarding to claim 30, the prefix 408\* is considered equivalent to the claimed media stream management information.

Regarding to claim 33, Salama et al disclose one protocol is H.323 and the other is SIP.

6. Claims 3, 12, 15-18, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salama et al as applied to claim 1 above, and further in view of 'An Architecture for Residential Internet Telephony Service' written by Huitema et al.

Regarding to claim 3, 12, and 15, Salama et al fail to disclose one of the IP telephony protocol is MGCP. Huitema et al disclose in figure 5 a call agent for translating between MGCP and H.323 protocol. A skilled artisan would have motivated to modify the GW1 in Salama et al so that in can also perform translation between MGCP and H.323 in order to connect IP telephony call between two IP telephony networks that use different protocols. Therefore, it would have been obvious to a person

having ordinary skill in the art by the time the invention was made to made one of the IP telephony protocol is MGCP in Salama et al system.

Regarding to claim 16, further to the rejection of claim 15 above, Salama et al fail to disclose explicitly in figure 17 the call contains a fast start parameter and performing translation the fast parameter between two protocols.

However, Salama et al disclose that each protocol has a different priority in connecting a call (Col. 19, line 58-col. 20, line 24). Therefore, a skilled artisan would have been motivated to modify the call in figure 17 so that it includes a priority information (fast start parameter) so that the system can connect a call based on protocol priority as taught by Salama et al. Therefore, it would have been obvious to a person having ordinary in the art by the time the invention was made to include a fast start parameter in the call and perform translation the fast parameter between two protocols.

Regarding to claim 17, and 18, Salama et al fail to disclose the call includes HOLD/RETRIEVE message and translating the HOLD/RETRIEVE message from the first protocol to the third protocol. Huitema et al disclose MGCP can support Holding and retrieving information (Pages 52, and 54). A skilled artisan would have been motivated to modify the call in figure 17 so that it also includes holding and retrieving information in order to provide users similar services supported by PSTN as taught by Huitema et al. Therefore, it would have been obvious to a person having ordinary skill in the art by the time the invention was made to include the HOLL/RETRIEVE message and translate the HOLD/RETRIEVE message from the first protocol to the third protocol in figure 17.

Regarding to claim 31, Salama et al and Huitema et al fail to disclose a computer program product stored in a computer readable medium for performing these steps. Since it is well known in the art that a procedure can be implemented by software, hardware or the combination of both. Software is suitable for a system that requires frequent modification because the only change that must be done is rewriting the program. A person of ordinary skill in the art would have been motivated to implement a system by software in order to employ its easy-to-modify feature. Therefore, it would have been obvious to a person having ordinary skill in the art by the time the invention was made to write a computer program product and store the program in a computer readable medium for performing these steps.

***Allowable Subject Matter***

7. Claims 22-26 are allowed.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhat Do whose telephone number is (703) 305-5743. The examiner can normally be reached on 9:00 AM - 6:00 PM (Monday-Friday).

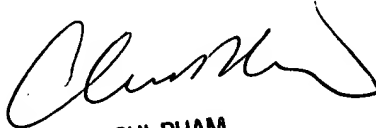
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nhat Do  
Examiner  
Art Unit 2663

ND

March 3, 2004.

  
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